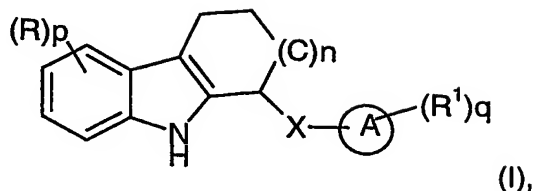


What is claimed is:

1. A compound of formula (I):



wherein:

n is 0, 1, or 2;

X is NH, O, or S(O)<sub>m</sub>;

each R is the same or different and is independently selected from the group consisting

of halogen, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, Ay, -NHR<sup>10</sup>Ay, Het, -NHHet, -NHR<sup>10</sup>Het, -OR<sup>2</sup>, -OAY, -OHet, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>Ay, -R<sup>10</sup>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NR<sup>2</sup>Ay, -R<sup>10</sup>C(O)R<sup>2</sup>, -C(O)R<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -R<sup>10</sup>CO<sub>2</sub>R<sup>2</sup>, -C(O)NR<sup>2</sup>R<sup>3</sup>, -C(O)Ay, -C(O)NR<sup>2</sup>Ay, -C(O)Het, -C(O)NHR<sup>10</sup>Het, -R<sup>10</sup>C(O)NR<sup>2</sup>R<sup>3</sup>, -C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NHC(NH)NR<sup>2</sup>R<sup>3</sup>, -C(NH)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(NH)NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>Ay, -R<sup>10</sup>SO<sub>2</sub>NHCOR<sup>2</sup>, -R<sup>10</sup>SO<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>SO<sub>2</sub>R<sup>2</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, cyano, nitro, or azido;

each R<sup>1</sup> is the same or different and is independently selected from the group

consisting of halogen, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, Ay, -NHR<sup>10</sup>Ay, Het, -NHHet, -NHR<sup>10</sup>Het, -OR<sup>2</sup>, -OAY, -OHet, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>Ay, -R<sup>10</sup>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NR<sup>2</sup>Ay, -R<sup>10</sup>C(O)R<sup>2</sup>, -C(O)R<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -R<sup>10</sup>CO<sub>2</sub>R<sup>2</sup>, -C(O)NR<sup>2</sup>R<sup>3</sup>, -C(O)Ay, -C(O)NR<sup>2</sup>Ay, -C(O)Het, -C(O)NHR<sup>10</sup>Het, -R<sup>10</sup>C(O)NR<sup>2</sup>R<sup>3</sup>, -C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NHC(NH)NR<sup>2</sup>R<sup>3</sup>, -C(NH)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(NH)NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>Ay, -R<sup>10</sup>SO<sub>2</sub>NHCOR<sup>2</sup>, -R<sup>10</sup>SO<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>SO<sub>2</sub>R<sup>2</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, cyano, nitro, or azido;

each m independently is 0, 1, or 2;

each R<sup>10</sup> is the same or different and is independently selected from alkylene, cycloalkylene, alkenylene, cycloalkenylene, and alkynylene;

p and q are each independently selected from 0, 1, 2, 3, 4, or 5;

each of R<sup>2</sup> and R<sup>3</sup> are the same or different and are independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, -R<sup>10</sup>OH, -R<sup>10</sup>(OR<sup>10</sup>)<sub>w</sub>, and -R<sup>10</sup>NR<sup>4</sup>R<sup>5</sup>;

w is 1-10;

each of R<sup>4</sup> and R<sup>5</sup> are the same or different and are independently selected from the group consisting of alkyl, cycloalkyl, alkenyl, cycloalkenyl, and alkynyl;

Ay represents an aryl group;

Het represents a 5- or 6-membered heterocyclyl or heteroaryl group;

ring A is aryl or heteroaryl; and

pharmaceutically acceptable salts, solvates, and physiologically functional derivatives thereof.

2. The compound of claim 1 wherein X is NH.
3. The compound of claim 1 wherein alkyl is C<sub>1</sub>-C<sub>6</sub> alkyl, alkoxy is C<sub>1</sub>-C<sub>6</sub> alkoxy, and haloalkyl is C<sub>1</sub>-C<sub>6</sub> haloalkyl.
4. The compound of claim 1 wherein at least p or q is not 0.
5. The compound of claim 1 wherein both p and q are each 1.
6. The compound of claim 1 wherein n is 1 or 2.
7. The compound of claim 6 wherein n is 1.
8. The compound of claim 1 wherein R is selected from halogen, alkyl, haloalkyl, cycloalkyl, -R<sup>10</sup>cycloalkyl, Ay, Het, -OR<sup>2</sup>, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -COR<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -CONR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, cyano, nitro, or azido.
9. The compound of claim 8 wherein R is selected from halogen, alkyl, haloalkyl, cycloalkyl, -R<sup>10</sup>cycloalkyl, Ay, Het, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -COR<sup>2</sup>, -CONR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, or cyano.
10. The compound of claim 9 wherein R is selected from halogen, alkyl, or haloalkyl.
11. The compound of claim 10 wherein R is selected from Cl or Br.

12. The compound of claim 10 or 11 wherein R is substituted *para* to the depicted N atom.
13. The compound of claim 1 wherein R<sup>1</sup> selected from halogen, alkyl, haloalkyl, Aryl, Het, -OR<sup>2</sup>, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -COR<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -CONR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, cyano, nitro, or azido.
14. The compound of claim 13 wherein R<sup>1</sup> is selected from halogen, alkyl, haloalkyl, -OR<sup>2</sup>, cyano, or nitro.
15. The compounds of claim 14 wherein R<sup>1</sup> is selected from halogen, alkyl, haloalkyl, -OR<sup>2</sup>.
16. The compound of claim 15 wherein q is 1 or 2.
17. The compound of claim 1 wherein the A ring is aryl.
18. The compound of claim 17 wherein the A ring is phenyl.
19. The compound of claim 1 wherein the A ring is heteroaryl.
20. The compound of claim 19 wherein the heteroaryl is pyrimidinyl, pyridyl, or benzothiazolyl.
21. The compound of claim 20 wherein the heteroaryl is pyrimidinyl or pyridyl.
22. The compound of claim 21 wherein q is 0, 1, or 2.
23. The compound of claim 1 wherein when p is not 0, then each R is the same or different and is independently selected from the group consisting of halogen, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, Aryl, -NHR<sup>10</sup>Aryl, Het, -NHHet, -NHR<sup>10</sup>Het, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>Aryl, -R<sup>10</sup>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NR<sup>2</sup>Aryl, -R<sup>10</sup>C(O)R<sup>2</sup>, -C(O)R<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -R<sup>10</sup>CO<sub>2</sub>R<sup>2</sup>,

-C(O)NR<sup>2</sup>R<sup>3</sup>, -C(O)Ay, -C(O)NR<sup>2</sup>Ay, -C(O)Het, -C(O)NHR<sup>10</sup>Het,  
 -R<sup>10</sup>C(O)NR<sup>2</sup>R<sup>3</sup>, -C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NHC(NH)NR<sup>2</sup>R<sup>3</sup>,  
 -C(NH)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(NH)NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>Ay, -  
 R<sup>10</sup>SO<sub>2</sub>NHCOR<sup>2</sup>, -R<sup>10</sup>SO<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>SO<sub>2</sub>R<sup>2</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, cyano, nitro, or azido.

24. The compound of claim 1 selected from
- 6-Bromo-*N*-phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4-methylphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Bromo-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Bromo-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Bromo-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Bromo-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride
  - 6-Chloro-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4,6-dimethoxypyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4-methylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Chloro-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Bromo-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride
  - 6-Bromo-*N*-(5-propylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Methoxy-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Methoxy-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - N*-(4,6-Dimethoxypyrimidin-2-yl)-6-methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride
  - 6-Bromo-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride
  - 6-Bromo-*N*-[5-(trifluoromethyl)pyrimidin-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-Bromo-*N*-[5-(trifluoromethyl)pyridin-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 6-[(6-Bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile
  - N*-(1,3-Benzothiazol-2-yl)-6-bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - N*-Pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine
  - 2-Bromo-*N*-pyrimidin-2-yl-5,6,7,8,9,10-hexahydrocyclohepta[*b*]indol-6-amine
  - 6-Methyl-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride salt

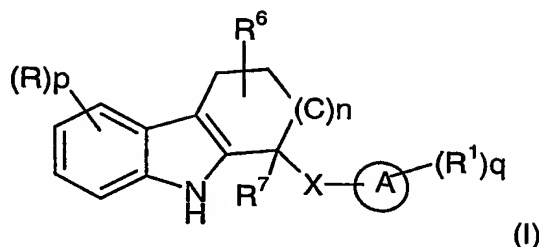
Methyl 1-anilino-2,3,4,9-tetrahydro-1*H*-carbazole-6-carboxylate  
6-[(6-Methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile hydrochloride salt  
*N*-Phenyl-6-(trifluoromethyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
*N*-Phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(1*H*-indol-5-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3,4-dichlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine; and  
6-Bromo-*N*-(4-fluorophenoxy)-2,3,4,9-tetrahydro-1*H*-carbazole.

25. The compound of claim 1 selected from

6-Bromo-*N*-phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methylphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Chloro-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4,6-dimethoxypyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Bromo-*N*-(5-propylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
*N*-(4,6-Dimethoxypyrimidin-2-yl)-6-methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Bromo-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride

6-Bromo-*N*-[5-(trifluoromethyl)pyrimidin-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-[5-(trifluoromethyl)pyridin-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-[(6-Bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile  
*N*-(1,3-Benzothiazol-2-yl)-6-bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
2-Bromo-*N*-pyrimidin-2-yl-5,6,7,8,9,10-hexahydrocyclohepta[*b*]indol-6-amine  
6-Methyl-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride salt  
Methyl 1-anilino-2,3,4,9-tetrahydro-1*H*-carbazole-6-carboxylate  
6-[(6-Methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile hydrochloride salt  
*N*-Phenyl-6-(trifluoromethyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
*N*-Phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3,4-dichlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine; and  
6-Bromo-*N*-(4-fluorophenoxy)-2,3,4,9-tetrahydro-1*H*-carbazole.

26. The compound of claim 1 wherein the compound of formula (I) further comprises:



including salts, solvates and pharmaceutically functional derivatives wherein  $R^6$  is H, alkyl,  $-OR^2$ ,  $-NR^2R^3$ , Ay, Het,  $-C(O)R^2$ ,  $-CO_2R^2$ ,  $-CONR^2R^3$ ,  $-S(O)_mR^2$ , or oxo, where  $R^2$  and  $R^3$  are as defined above; and

$R^7$  is H or alkyl, provided that  $R^6$  and  $R^7$  are not both H.

27. The compound of claims 1 to 26 substantially as hereinbefore defined with reference to any one of the Examples.
28. A pharmaceutical composition comprising a compound according to claims 1 to 26, and a pharmaceutically acceptable carrier.
29. A compound according to claims 1 to 26 for use as an active therapeutic substance.
30. A compound according to claims 1 to 26 for use in the treatment or prophylaxis of diseases and conditions caused by oncogenic viruses, including adenoviruses, retroviruses, and papovavirus family, including polyoma viruses and papilloma viruses.
31. A compound according to claims 1 to 26 for use in the treatment or prophylaxis of conditions or disorders due to HPV infection.
32. The compound of claim 31 wherein the condition or disease is warts, genital warts, cervical dysplasia, recurrent respiratory papillomatosis, or cancers associated with papillomavirus infection.
33. The compound of claim 32 wherein the cancer is anogenital cancers, head and neck cancers, and skin cancers.

34. The compound of claim 33 wherein  
the anogenital cancers are cervical, anal and perianal, vulvar, vaginal, and penile cancers;  
the head and neck cancers are oral pharyngeal region and esophagus cancers; and  
the skin cancers are basal cell carcinoma and squamous cell carcinoma.
35. Use of a compound according to any one of claims 1 to 26 in the manufacture of a medicament for use in the treatment or prophylaxis of oncogenic viruses, including adenoviruses, retroviruses, and papovavirus family, including polyoma viruses and papilloma viruses.
36. Use of a compound according to claims 1 to 26 in the manufacture of a medicament for use in the treatment or prophylaxis of conditions or disorders due to HPV infection.
37. Use of a compound as in claim 36 wherein the condition or disorder is warts, genital warts, cervical dysplasia, recurrent respiratory papillomatosis, or cancers associated with papillomavirus infection.
38. A method for the treatment or prophylaxis of oncogenic viruses, including adenoviruses, retroviruses, and papovavirus family, including polyoma viruses and papilloma viruses comprising the administration of a compound according to any one of claims 1 to 26.
39. A method for the treatment or prophylaxis of conditions or disorders due to HPV infection comprising the administration of a compound according to any one of claims 1 to 26.
40. The method of claim 39 wherein the condition or disorder is warts, genital warts, cervical dysplasia, recurrent respiratory papillomatosis, or cancers associated with papillomavirus infection.